

**AMENDMENTS TO THE CLAIMS  
PURSUANT TO REVISED 37 CFR § 1.21**

- 1-5. (Canceled)
6. (Presently Amended) A composition, comprising:
- a) a three dimensional structure formed by a solid matrix having a porosity; and
  - b) a simulated body fluid contacting said structure, wherein said simulated body fluid comprises a man-made aqueous solution comprising calcium and phosphorous ions at concentrations in a range between 0.5 - 2.5 times the concentration of said ions found in normal human plasma, and wherein said matrix comprises a mixture of;
    - i) at least one polymer, wherein said polymer is selected from the group consisting of poly(L-lactic acid), poly(D,L-lactic acid-co-glycolic acid (PLGA) and poly(methyl methacrylate); and
    - ii) at least one inorganic compound wherein said inorganic compound is selected from the group consisting of hydroxyapatite and calcium phosphate.
7. (Original) The composition of Claim 6, further comprising c) one or more living cells contacting said matrix.
8. (Original) The composition of Claim 6, wherein said one or more cells are selected from the group consisting of osteoblast, fibroblasts, and epithelial.
9. (Previously Amended) The composition of Claim 6, wherein said porosity is greater than approximately 85%.
10. (Previously Amended) The composition of Claim 6, wherein said porosity is greater than approximately 90%.

11. (Previously Amended) The composition of Claim 6, wherein said porosity is greater than approximately 95%.
12. (Original) The composition of Claim 6, wherein said matrix is biodegradable.
13. (Previously Amended) The composition of Claim 1, wherein said porosity is greater than approximately 80%.
14. (Previously Amended) The composition of Claim 6, wherein said porosity is greater than approximately 80%.
15. (Previously Added) A solid matrix having a porosity comprising a mixture of hydroxyapatite and at least one polymer in a ratio, wherein said polymer is selected from the group consisting of poly(L-lactic acid), poly(D,L-lactic acid-co-glycolide acid (PLGA)), and poly(methyl methacrylate), wherein said ratio is between 90:10 and 10:90.
16. (Previously Added) The solid matrix of Claim 15, wherein said ratio is 70:30.
17. (Previously Added) The solid matrix of Claim 15, wherein said ratio is 30:70.
18. (Previously Added) The solid matrix of Claim 15, wherein said porosity is greater than approximately 80%.
19. (Previously Added) The solid matrix of Claim 15, wherein said porosity is greater than approximately 85%.
20. (Previously Added) The solid matrix of Claim 15, wherein said porosity is greater than approximately 90%.

21. (Previously Added) The solid matrix of Claim 15, wherein said porosity is greater than approximately 95%.
22. (Previously Added) The solid matrix of Claim 15, wherein said matrix is biodegradable.
23. (Previously Added) A mixture comprising poly(L-lactic acid), hydroxyapatite and a solvent, wherein said poly(L-lactic acid) and said hydroxyapatite are in a ratio of approximately 1:1 by weight.